

Braukmann F76CS/FN76CS/FK76CS/FKN76CS

Installation instructions

Einbauanleitung

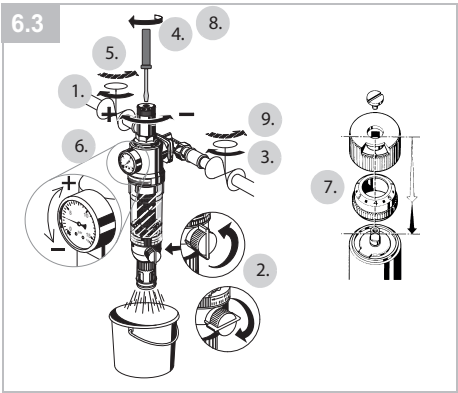
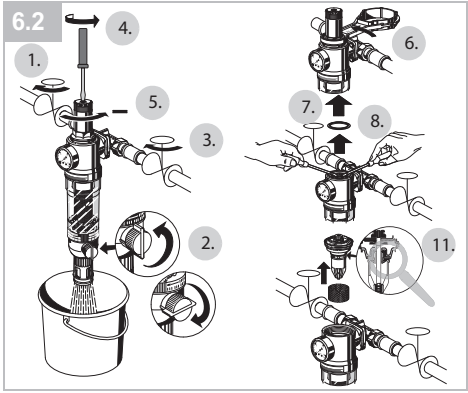
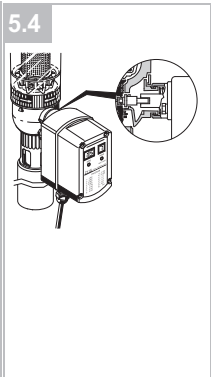
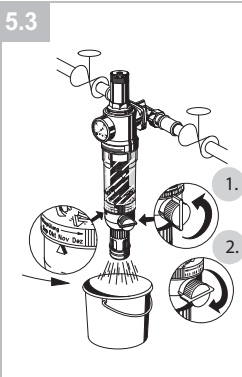
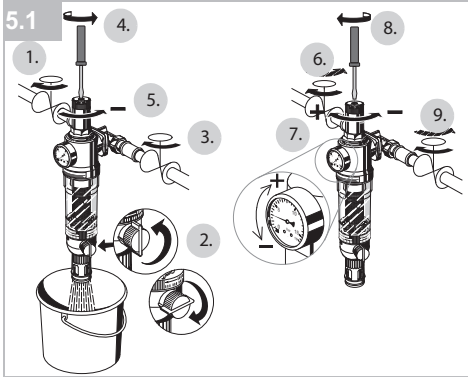
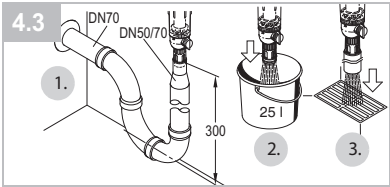
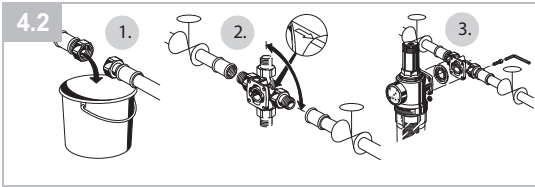
Instructions d'installation



Filters and Filter Combination

Filter und Filterkombination

Filtres et Combinaisons de Filtres



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1 Safety Guidelines

- Follow the installation instructions.
- Use the appliance
 - according to its intended use
 - in good condition
 - with due regard to safety and risk of danger.
- Note that the appliance is exclusively for use in the applications detailed in these installation instructions (see 2 Technical Data). Any other use will not be considered to comply with requirements and would invalidate the warranty.
- Please take note that any assembly, commissioning, servicing and adjustment work may only be carried out by authorized persons.
- Immediately rectify any malfunctions which may influence safety.

2 Technical Data

2.1 F76CS/FN76CS

| | |
|--|--|
| Media | |
| Medium: | Drinking water |
| Connections/Sizes | |
| Connection sizes: | 3/4" - 1 1/4" |
| Pressure values | |
| Operating pressure range: | 1.5 - 16 bar |
| Operating temperatures | |
| Operating temperature range medium accord. to EN 1567: | 5 °C - 30 °C |
| Specifications | |
| Installation position: | Horizontal or vertical, with filter bowl downwards |

Note: The filter is constructed for drinking water installations. In case of a process water application the filter has to be proven individually.

2.2 FK76CS/FKN76CS

| | |
|--|----------------|
| Media | |
| Medium: | Drinking water |
| Connections/Sizes | |
| Connection sizes: | 3/4" - 1 1/4" |
| Pressure values | |
| Operating pressure range: | 1.5 - 16 bar |
| Max. inlet pressure with clear filter bowl: | 16 bar |
| Outlet pressure: | 1.5 - 6 bar |
| Operating temperatures | |
| Operating temperature range medium accord. to EN 1567: | 5 °C - 30 °C |

Specifications

| | |
|------------------------|--|
| Installation position: | Horizontal or vertical, with filter bowl downwards |
|------------------------|--|

Note: The filter is constructed for drinking water installations. In case of a process water application the filter has to be proven individually.

3 Options

For Options visit homecomfort.resideo.com/europe

4 Assembly

4.1 Installation Guidelines

- Install in horizontal or vertical pipework with filter bowl downwards
 - This position ensures optimum filter efficiency
- Install shut-off valves
- These filters are armatures which need to be maintained regularly
- Ensure good access
 - Pressure gauge can be read off easily
 - Degree of contamination can be easily seen with clear filter bowl
 - Simplifies maintenance and inspection
- The installation location should be protected against frost
- Fit immediately after water meter
- Related to the EN 806-2 it is recommended to install the filter immediately after the water meter
- In order to avoid flooding, it is recommended to arrange a permanent, professionally dimensioned wastewater connection

4.2 Assembly instructions

- Thoroughly flush pipework
- Install rotatable connector piece
 - Note flow direction
 - Install without tension or bending stresses

When connecting to an existing flange of another make ensure that the inlet flow is through the outer ring of holes. If this is not so, the whole connection piece must be installed the other way round, even if the arrow does not then indicate the actual flow direction. If the flange is threaded, the threaded holes must be drilled out to a diameter of 6.3 mm.

- Install filter with sealing to rotatable connector
- Seal in pressure gauges
- Set outlet pressure

4.3 Discharge of reverse rinsing water

The reverse rinsing water must be routed to the drain channel in such a way that no backwater can occur.

To do this there are 3 options:


- Direct connection:

- Connector DN 50/70 as well as the necessary pipes and siphon (3 elbows 90°) in DN 70.
2. Discharge into floor drain
 3. Drain into open container.

| | |
|---|-------------------------|
| Filter size | Reverse rinsing volume* |
| 1/2" and 3/4" | 12 Liter |
| 1" and 1 1/4" | 15 Liter |
| *at 4 bar inlet pressure and 3 x 3 seconds reverse rinsing duration | |


5 Start-up

5.1 Setting outlet pressure (FK76CS/ FKN76CS only)

-  Set outlet pressure min. 1 bar under inlet pressure.
1. Close shut-off valve on inlet
 2. Release pressure on outlet side (e.g. through water tap)
 3. Close shut-off valve on outlet
 4. Loosen slotted screw
 - Do not remove slotted screw
 5. Slacken tension in compression spring
 - Turn adjustment handle counter clockwise (-) until it does not move any more
 6. Slowly open shut-off valve on inlet
 7. Turn control handle until the setting scale shows the desired value
 8. Retighten slotted screw
 9. Slowly open shut-off valve on outlet

5.2 Reverse rinsing

During reverse rinsing, an inlet (dynamic) pressure of at least 1.5 bar is required. The reverse rinsing interval depends on the degree of dirt in the water. At the latest every 6 months, reverse rinsing should be carried out according to EN 806-5. Our recommendation at least every 2 months! To ensure convenient and regular adherence to the reverse rinsing interval, we recommend installing an automated reverse rinsing system Z11S.

-  Filtered water can also be tapped during reverse rinsing.

5.3 Manual reverse rinsing

If reverse rinsing water is not to be discharged via a direct connection, a collecting container must be positioned beneath before reverse rinsing.

1. Open ball valve by turning the reverse rinsing button to the stop point
 - Select bar must be upright
 - The patented reverse rinsing system starts


- When filtering with Double Spin Technology, a visual function check is possible through the rotating red rotor
2. Close ball valve again after approx. 3 seconds. Repeat procedure three times
 - If the filter is extremely dirty, the procedure may have to be repeated additional times

With aid of the memory ring, the next deadline for manual reverse rinsing can be booked.

5.4 Automatic reverse rinsing with the Z11S

The automated reverse rinsing system Z11S is available as an accessory. The automated system reliably takes over reverse rinsing of the filter at intervals which can be set between 4 minutes and 3 months.

6 Maintenance

-  In order to comply with EN 806-5, water fixtures must be inspected and serviced on an annual basis. As all maintenance work must be carried out by an installation company, it is recommended that a servicing contract should be taken out.

In accordance with EN 806-5, the following measures must be taken:

6.1 Inspection

6.1.1 Pressure reducing valve (FK76CS/ FKN76CS only)

1. Close shut-off valve on outlet
2. Check outlet pressure using a pressure meter when there is zero through-flow
 - If the pressure is increasing slowly, the valve may be dirty or defective. In this instance, carry out servicing and cleaning (See 6.2 Maintenance)
3. Slowly open shut-off valve on outlet

6.1.2 Filter

- The filter must be cleaned by reverse rinsing regularly, at least every 6 months. (acc. to EN 806-5) Our recommendation at least every 2 months!
- Non-compliance can lead to the filter becoming blocked. This results in a drop in pressure and decreased water flow
- The filter meshes are made of stainless steel. A red coating as a consequence of rust from the pipelines has no influence on function or the way the filter works



CAUTION!

Do not forget to do a visual check of the ball valve. Replace if it is dripping!

6.2 Maintenance



If necessary, the outside surface of the filter combination can be cleaned.
Use only cold, clear drinking water to clean the surfaces! Any other cleansers cause damage to the plastic components!

6.2.1 Pressure reducing valve (FK76CS/ FKN76CS only)

1. Close shut-off valve on inlet
2. Release pressure on outlet side (e.g. through water tap)
3. Close shut-off valve on outlet
4. Loosen slotted screw
 - Do not remove slotted screw



CAUTION!

There is a spring in the spring bonnet. It may cause injuries if the spring is derailing.

- Make sure tension in compression spring is slackened!
5. Slacken tension in compression spring
 - Turn adjustment handle counter clockwise (-) until it does not move any more
 - Do not turn in too far!
 6. Unscrew spring bonnet
 - Use double ring wrench ZR10K
 7. Remove slip ring
 8. Remove valve insert with a pair of pliers
 9. Unscrew filter bowl and guide piece
 - Use double ring wrench ZR10K
 10. Remove old filter insert and replace by a new one!
 11. Remove slotted ring
 12. Place O-ring onto filter bowl
 13. Screw in filter bowl hand-tight (without tools)
 14. Check that sealing ring, edge of nozzle and slotted ring are in good condition, and if necessary replace the entire valve insert
 15. Reassemble in reverse order



Press in diaphragm with finger before inserting slip ring

Screw in filter bowl hand-tight (without tools)

16. Set outlet pressure and adjust setting scale
17. Slowly open shut-off valve on inlet
18. Slowly open shut-off valve on outlet

6.2.2 Filter

- The filter must be cleaned by reverse rinsing regularly, at least every 2 months
- Non-compliance can lead to the filter becoming blocked This results in a drop in pressure and decreased water flow
- The filter meshes are made of stainless steel. A red coating as a consequence of rust from the pipelines has no influence on function or the way the filter works



Do not forget to do a visual check of the ball valve. Replace if it is dripping!

6.3 Adjusting the setting scale

If the adjustment knob is removed, this setting is lost. A new setting can be achieved using a pressure gauge.

1. Close shut-off valve on inlet
2. Release pressure on outlet side (e.g. through water tap)
3. Close shut-off valve on outlet
4. Loosen slotted screw
 - Do not remove slotted screw
5. Slowly open shut-off valve on inlet
6. Set desired outlet pressure (e.g. 4 bar)
7. Align scale (e.g. 4) in middle of viewing window
8. Retighten slotted screw
9. Slowly open shut-off valve on outlet

7 Disposal

Observe the local requirements regarding correct waste recycling/disposal!

8 Troubleshooting

8.1 F76CS/FN76CS

| Problem | Cause | Remedy |
|---------------------------------|---|--------------------------------|
| Too little or no water pressure | Shut-off valves upstream or downstream from filter not fully open | Open the shut-off valves fully |
| | Filter mesh dirty | Reverse rinsing |
| | Not fitted in flow direction | Fit filter in flow direction |

8.2 FK76CS/FKN76CS

| Problem | Cause | Remedy |
|--|---|---|
| Water is escaping from the spring bonnet | Diaphragm in valve insert is faulty | Replace valve insert |
| Too little or no water pressure | Shut-off valves up- or downstream of the pressure reducing valve are not fully open | Open the shut-off valves fully |
| | Pressure reducing valve is not set to the desired outlet pressure | Set outlet pressure |
| | Filter mesh dirty | Reverse rinsing |
| | Not fitted in flow direction | Fit filter in flow direction (note direction of arrow on housing) |
| The outlet pressure set does not remain constant | Filter mesh dirty | Reverse rinsing |
| | Valve insert, sealing ring or edge of nozzle is contaminated or worn | Replace valve insert |
| | Rising pressure on outlet (e.g. in boiler) | Check check valve, safety group etc. |

9 Spare Parts

For Spare Parts visit homecomfort.resideo.com/europe

10 Accessories

For Accessories visit homecomfort.resideo.com/europe